AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 4, as follows:

The invention is related to RADIUS-accounting communication and in particular ~~[~~an arrangement~~]~~ and a method for assigning unique identifiers for allowing communication between a GPRS (General Packet Radio Service)~~-~~system and a RADIUS (Remote Authentication Dial In User Service) server.

Please amend the paragraph beginning at page 1, line 4, as follows:

~~The problem areas~~ BACKGROUND

Please amend the paragraph beginning at page 1, line 11, as follows:

RADIUS (Remote Authentication Dial In User Service) is a protocol used to authenticate remote users logging in to a network and is used as the way to authenticate users in a GPRS-system. In case the RADIUS-server provides the subscriber with a dynamic IP-address to use, a RADIUS accounting-server ~~is uses to mark~~ marks the address as used and freed.

Please amend the paragraph beginning at page 1, line 17, as follows:

The GPRS (General Packet Radio Service) offers a high-speed, packet-switched, mobile datacommunication network, where the subscribers can connect themselves to an external network from a mobile terminal. The GPRS system consists mainly of two nodes~~,~~. ~~where~~ One of them, the Gateway GPRS Support Node (GGSN), is an example node where ~~is the component involved in~~ this invention may be implemented.

Please amend the paragraph beginning at page 1, line 23, as follows:

The subscribers need an IP (Internet Protocol)-address to route packets to and from the external network. This IP-address can be provided by a RADIUS-server, in which case a unique identifier must be provided to relate the subscriber to this IP-address. The identifier is described as attribute Acct-Session-Id in IETF RFC 2139 (April 1997) "RADIUS Accounting". Due to the nature of a GPRS system, a subscriber will with a high degree of probability be connected to an external network for a long time, allocating the IP-address for an equally long period of time.

Please amend the paragraph beginning at page 1, line 31, as follows:

The RADIUS accounting server is requested to start an accounting session when the RADIUS client sends an accounting start request towards the RADIUS accounting server. This is done to mark the IP-address as used by the subscriber in the RADIUS accounting server. The RADIUS client in the accounting start request must give an accounting identifier, and the same accounting identifier is sent in an accounting stop request to stop the accounting and release the IP-address. The accounting identifier must be generated for each subscriber' connection receiving an IP-address from the RADIUS server, and it must be guaranteed to be unique for each connection.

Please amend the paragraph beginning at page 2, line 4, as follows:

The GPRS-system can be connected to several external networks, and all the networks may use the same RADIUS server. The different networks may also contain the same range of IP-addresses (private address-space), and hence the RADIUS server

must be able to give out the same IP-address to subscribers belonging to the different external networks.

Please amend the paragraph beginning at page 2, line 10, as follows:

~~Known solutions and problems with these~~

Please amend the paragraph beginning at page 2, line 12, as follows:

The accounting identifier is usually made from the time in the system acting as a client (usually an NAS) towards the RADIUS server. Other solutions are one or several counters that are incremented for each new accounting session and/or for each restart of the system. It is also known that some implementations use process identifiers as a part of the accounting identifier.

Please amend the paragraph beginning at page 2, line 17, as follows:

~~The main problem with the above mentioned solutions is that they all~~ But these approaches require system resources to create and maintain the generation of the accounting identifiers. Getting the system-time does not require any storage, but may be inaccurate or inefficient in the case of a large number of ~~simultaneously~~ simultaneous requests for the system-time. Having counters to be incremented ~~will use~~ uses system memory~~,~~ and computational time to recalculate the values and requires some algorithm to avoid two subscribers getting the same value of the counter. The counter must also be large enough to generate enough identifiers ~~to~~ for all the possible subscribers. These values ~~will not be~~ are not predictable and are usually based on a statistical distribution to assure uniqueness; hence they can not be guaranteed to be absolutely unique.

Please amend the paragraph beginning at page 2, line 29, as follows:

Q11 Delete ~~Objects of the invention~~

Please amend the paragraph beginning at page 2, line 30, as follows:

Q11 An object of the invention is to overcome ~~the~~ these problems ~~related to prior art solutions in the art,~~ by providing unique accounting identifiers ~~without involving necessity for~~ using any new system resources other than those already available.

Please amend the paragraph beginning at page 2, line 34, as follows:

Q12 ~~Brief disclosure of the invention~~ Summary

Please amend the paragraph beginning at page 3, line 22, as follows:

Q13 Figure 1 illustrates the basic steps for generating an accounting identifier, and

Please amend the paragraph beginning at page 3, line 26, as follows:

Q14 Detailed ~~description~~ Description ~~of embodiments~~

Please amend the paragraph beginning at page 3, line 28, as follows:

Q15 ~~The invention is now to be described firstly with reference~~ Reference is made to Figure 1. When connecting an external network to the GPRS system, the network is identified with an Access Point Name (APN), such as e.g. APN1 ~~(see Figure 1)~~. Each APN is given a gateway address GW in the GGSN, as seen from the external network. By assuring that this IP-address is unique for each APN defined in the GGSN, all the external networks will have ~~its~~ their own, unique identifier. Since two subscribers (MS) in the same external network should never use the same IP-address at the same time, subscribers connected to the same APN will always have different IP-addresses. ~~The~~

~~idea is to combine these~~ These two IP-addresses, the gateway-address for the APN and the address assigned to the subscriber, are combined to form the accounting identifier.

Please amend the paragraph beginning at page 4, line 4, as follows:

When the GGSN receives an IP-address to send to the subscriber from the RADIUS-server, it looks up the gateway IP-address belonging to the external ~~net~~ network to which the subscriber is connecting ~~himself~~. This address has already been configured when the external network is attached to the GPRS-system, and checked to be unique within the GGSN.

Please amend the paragraph beginning at page 4, line 10, as follows:

To construct the accounting identifier to send to the RADIUS accounting-server, the GGSN ~~will now use~~ uses these two available IP-addresses. The addresses can be appended to form a eight byte long identifier (in case of IP-addresses from IP version 4), or the numbers could be converted to ASCII numbers to make the string printable. When the numbers are converted, it would be wise to insert dots (ASCII value 46) between the decimal-groups in the addresses to be able to clearly see the addresses used in the identifier (e.g. for an operator looking into the accounting records).

Please amend the paragraph beginning at page 4, line 18, as follows:

Gateway IP-address = 129.24.24.1

Please amend the paragraph beginning at page 5, line 10, as follows:

Figure 2 shows three external networks connected to a GGSN node in a GPRS system. Each network has one subscriber connected, and all the three networks use the

same RADIUS server for authentication and dynamic IP-address allocation for the subscribers. Even though the networks identified as APN2 and APN3 ~~has~~ have been assigned the same IP-address to the two subscribers, the accounting identifier will be unique because of the different gateway addresses. Table I shows the generated accounting identifiers for the three subscribers.

Please amend the paragraph beginning at page 5, line 17, as follows:

APN	Gateway Address	Subscriber IP Address	Accounting Identifier
APN1	129.24.24.1	129.24.24.24	"129.24.24.1.129.24 .24.24"
APN2	193.25.01	193.25.5.1	"193.25.0.1.193.25. 5.1"
APN3	193.26.0.1	193.25.5.1	"193.26.01.193.25.5 .1"

Please amend the paragraph beginning at page 5, line 21, as follows:

The creation of the identifier used for accounting purposes described above ~~will~~ does not involve any new resources than ~~the ones~~ those already available. Since the addresses already are unique, the combination of the two addresses will form a perfectly valid identifier. This will not restrict any limitations on concurrency regarding RADIUS accounting messages, and the accounting identifier is guaranteed unique as long as the subscriber is still using the assigned IP-address (i.e. no accounting stop has been sent towards the RADIUS server). The creation of the accounting identifier will not use any extra resources whatsoever, and will always be available as long as an IP-address exists. The identifier ~~will~~ is also ~~be~~ very predictable~~;~~. ~~and only~~ Simply by looking at ~~this~~ it one

can tell which external network the accounting record belongs to~~,~~ as well as ~~knowing~~ determine the IP-address for the subscriber.

Please amend the paragraph beginning at page 6, line 1, as follows:

This invention has more general application whenever ~~Whenever~~ several IP-addresses are available, which together will identify the object in question uniquely~~,~~ ~~these~~ These addresses can be concatenated or otherwise combined to form a unique identifier.